

Figure 1

% Mechanical Retention for Polycarbonate Articles after Ionizing Radiation Sterilization

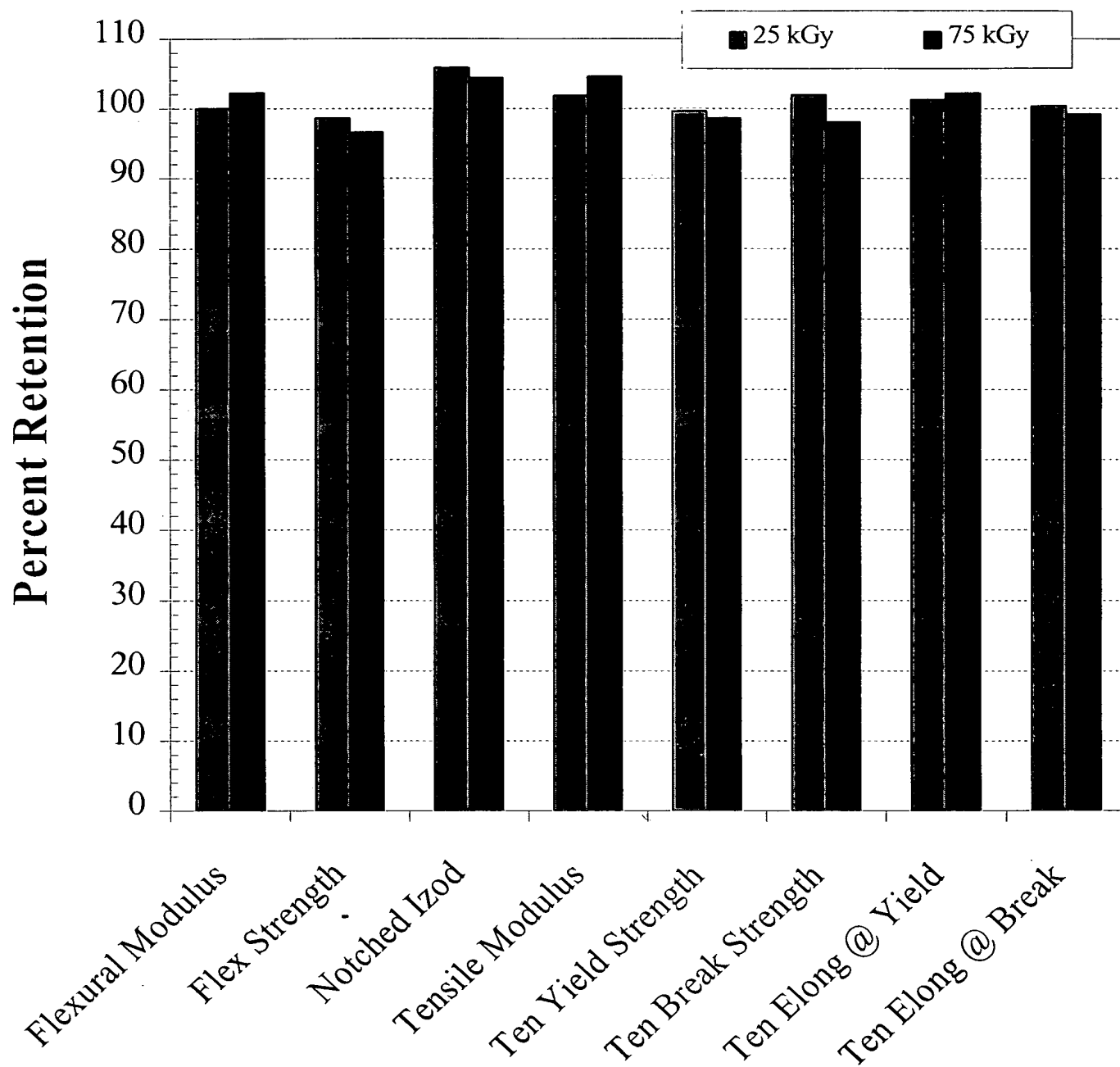


Figure 2

Yellowness Index of Polycarbonate
after γ -irradiation

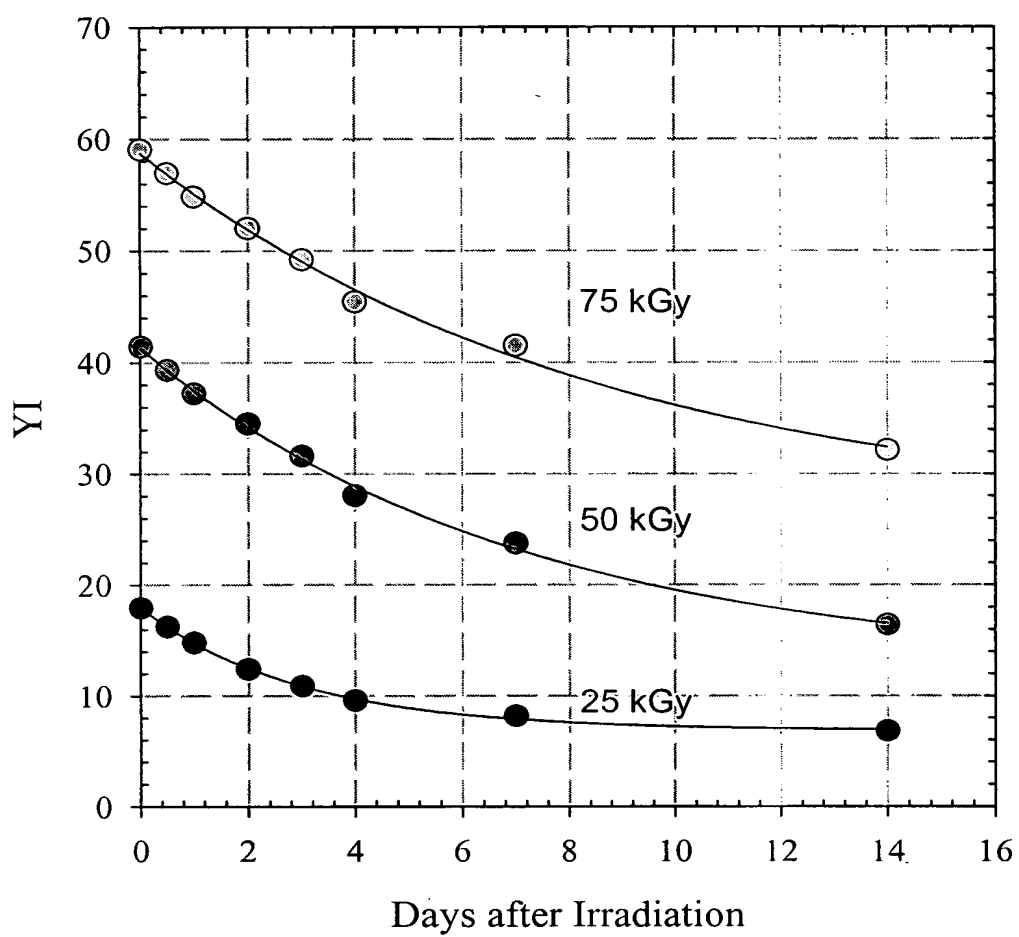


Figure 3

Effect of Polyester Content on dYI After Ionizing Radiation Sterilization

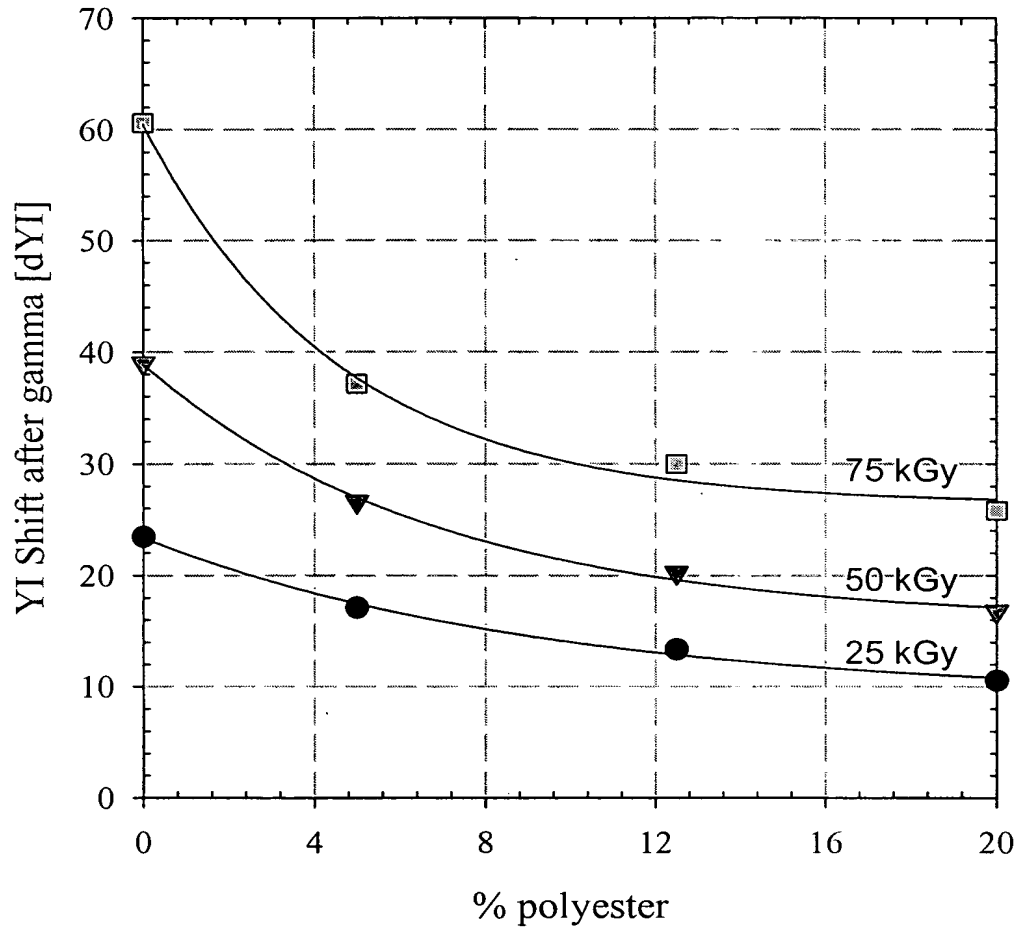


Figure 4

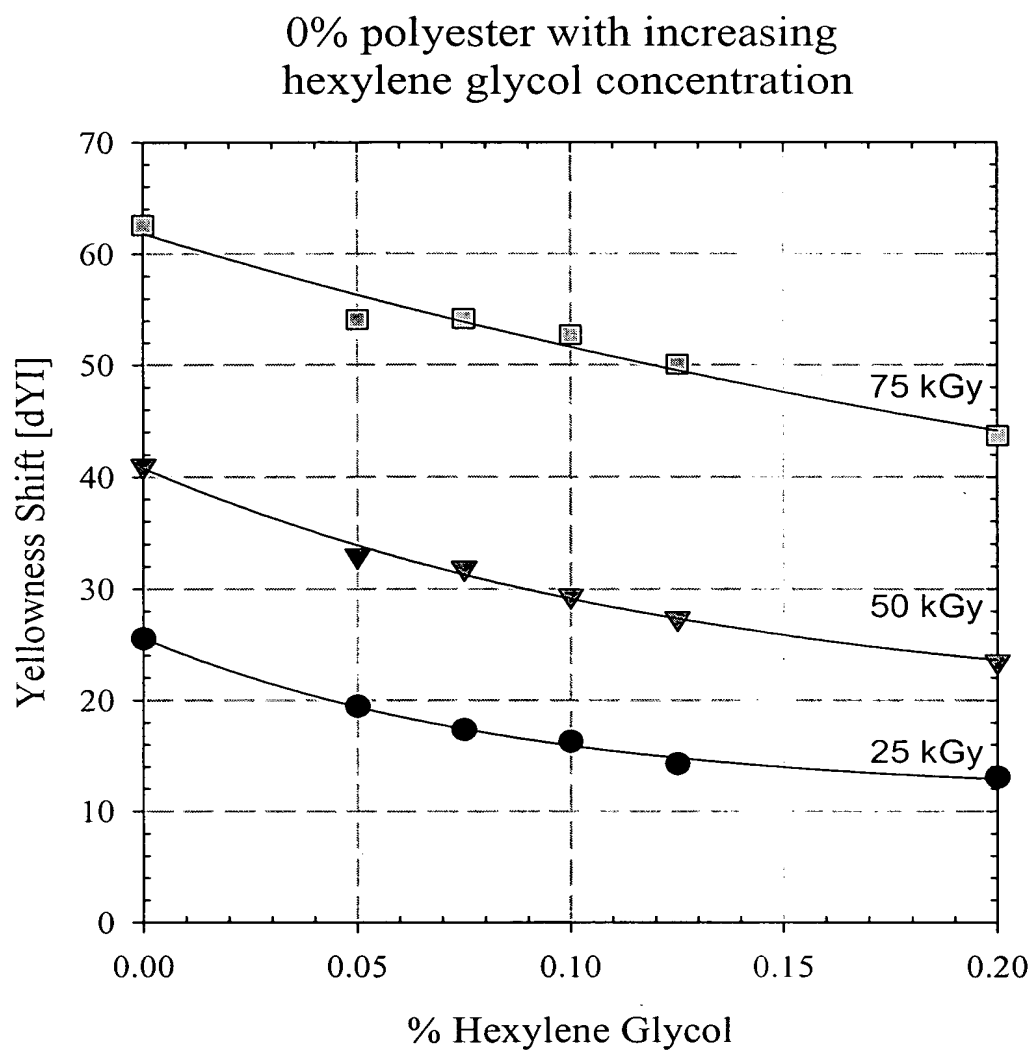


Figure 5

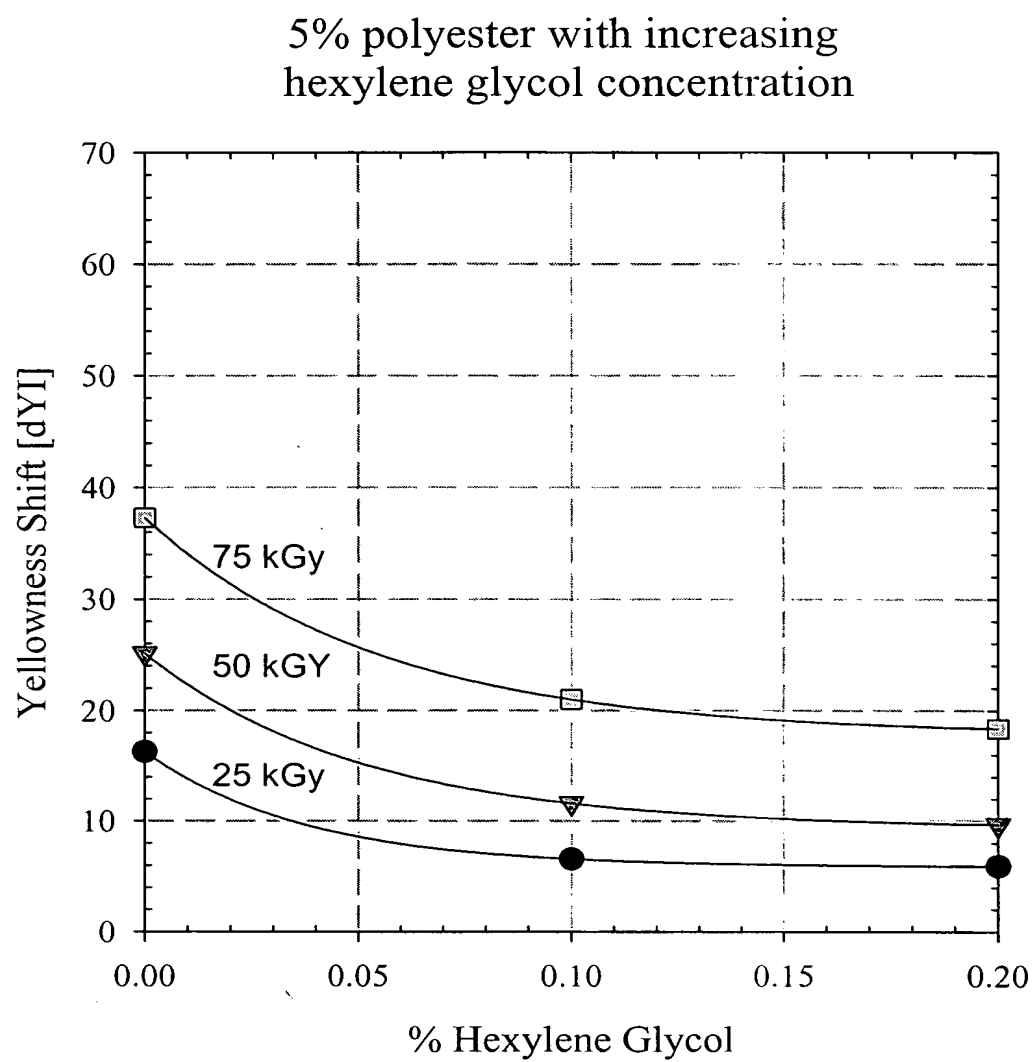


Figure 6

Effect of Polyester Content on dYI after Ionizing Radiation Sterilization

Yellowness shift (dYI)			
% polyester	25 kGy	50 kGy	75 kGY
0	23.4	39.0	60.6
5	17.1	26.6	37.1
13	13.4	20.2	30.0
20	10.5	16.8	25.8

Figure 7

Effect of % Hexylene Glycol on dYI After Ionizing Radiation Sterilization

Yellowness Shift (dYI)			
<i>0% polyester</i>			
% HG	25 kGy	50 kGy	75 kGy
0.00	25.5	41.0	62.6
0.05	19.5	33.0	54.1
0.08	17.4	31.8	54.2
0.10	16.3	29.4	52.7
0.13	14.3	27.3	50.1
0.20	13.0	23.4	43.7
<i>5% polyester</i>			
% HG	25 kGy	50 kGy	75 kGy
0.0	19.4	28.9	39.4
0.1	9.1	14.2	24.6

Figure 8

dYI Changes After Photobleaching for Stabilized & Unstabilized Resins

Batch	[Hexylene glycol] (%)	[Poly-ester] (%)	Yellowness Shift (dYI)														
			25 kGy					50 kGy					75 kGy				
			0 days	7 days	14 days	21 days	28 days	0 days	7 days	14 days	21 days	28 days	0 days	7 days	14 days	21 days	
1	0.2	5	5.99	3.09	2.58	2.21	2.01	9.56	5.13	4.32	3.78	3.55	18.39	9.32	7.71	6.57	
2	0.1	13	6.34	3.35	2.90	2.54	2.33	11.04	5.78	4.95	4.69	4.25	18.51	9.17	7.91		
3	0.1	5	6.95	3.58	2.97	2.64	2.48	12.02	6.25	5.20	4.32	3.95	22.42	9.49	8.54	7.42	
4	0.2	5	5.53	2.94	2.51	2.06	1.91	9.09	4.79	4.03	3.51	3.15	17.31	7.86	6.92	6.06	
5	0.0	20	10.55	5.23	4.36	3.75	3.46	16.77	8.85	7.04	6.33	6.01	25.79	13.17	10.99	9.35	
6	0.1	5	6.77	3.60	2.85	2.41	2.27	11.48	5.86	4.94	4.26	3.87	21.74	9.42	8.24	7.09	
7	0.0	13	13.63	6.40	5.00	4.37	4.07	20.24	10.74	8.25	7.03	6.71	29.98	17.95	13.22	10.42	
8	0.0	13	13.37	6.48	5.17	4.70	4.21	19.99	9.22	7.44	6.80	6.16	28.64	17.04	12.67	10.62	
9	0.0	5	17.11	7.87	5.76	5.13	4.44	26.59	12.59	8.71	7.13	6.67	37.13	19.29	13.68	11.53	
10	0.1	13	6.40	3.48	2.97	2.60	2.44	10.65	5.49	4.83	4.30	3.85	18.26	9.93	7.91	7.33	
11	0.2	20	6.42	3.44	2.91	2.73	2.38	10.45	5.92	5.18	4.35	4.08	17.43	9.90	8.35	7.36	
12	0.0	5	15.23	6.66	5.32	4.64	4.08	24.65	11.74	8.21	7.07	6.05	38.11	23.56	17.07	12.30	
13	0.2	5	5.93	3.11	2.61	2.41	2.16	9.46	4.72	4.09	3.65	2.56	17.13	8.89	7.35	6.53	
14	0.2	5	5.93	3.11	2.63	2.25	2.01	9.68	5.19	4.47	3.87	3.55	18.38	9.30	7.65	6.38	
15	0.1	5	6.59	3.49	2.91	2.59	2.39	11.61	5.49	4.80	4.16	3.86	21.01	10.75	8.70	7.45	
16	0.0	5	16.30	7.29	5.53	4.74	4.29	25.11	12.40	8.45	7.06	6.50	37.29	18.84	13.66	10.83	
17	0.0	0	24.26	9.33	6.34	5.08	4.59	40.57	22.61	14.22	10.67	8.67	59.99	32.09	23.43	16.90	
18	0.1	0	14.08	5.69	4.68	3.68	3.12	26.57	11.76	8.53	6.81	6.12	47.95	24.29	16.47	12.63	
19	0.2	0	11.28	4.96	4.07	3.32	2.85	21.68	10.19	7.63	5.92	5.56	41.92	16.12	12.99	11.03	